

What is claimed is:

1. A capacitor, comprising:
a capacitor package;
a number of plate assemblies housed within the capacitor package, each plate assembly having a first polarity connection and a second polarity connection; and
a plurality of terminals, wherein multiple first polarity connections are coupled to a single first polarity terminal and corresponding multiple second polarity connections are coupled to multiple second polarity terminals.
2. The capacitor of claim 1, wherein a number of plate assemblies includes a number of fan-like plate assemblies.
3. The capacitor of claim 1, wherein a plurality of terminals includes at least one surface mount terminal.
4. The capacitor of claim 1, wherein the first polarity is an anode and the second polarity is a cathode.
5. The capacitor of claim 1, wherein the capacitor package includes a rectangular volume.
6. The capacitor of claim 1, wherein the capacitor package includes a cylindrical volume and the a number of plate assemblies include fan-like plate assemblies.
7. The capacitor of claim 1, wherein the plurality of terminals includes multiple first polarity terminals.
8. A capacitor, comprising:
a capacitor package;

a number of plate assemblies housed within the capacitor package, each plate assembly including:

- at least one aluminum foil plate;
- a conductive polymer;
- a dielectric layer separating the aluminum foil plate from the conductive polymer;
- a first polarity connection coupled to the aluminum foil plate;
- a second polarity connection coupled to the conductive polymer; and
- a plurality of terminals, wherein multiple first polarity connections are coupled to a single first polarity terminal and corresponding multiple second polarity connections are coupled to multiple second polarity terminals.

9. The capacitor of claim 8, further including a carbon layer over the conductive polymer and silver paint over the carbon layer.

10. The capacitor of claim 8, wherein a number of plate assemblies includes a number of fan-like plate assemblies.

11. The capacitor of claim 8, wherein the first polarity is an anode and the second polarity is a cathode.

12. The capacitor of claim 8, wherein the plurality of terminals are surface mount terminals.

13. A capacitor, comprising:

- a capacitor package;
- a number of plate assemblies with individual plates arranged parallel to each other and substantially perpendicular to a top surface of the capacitor package, each plate assembly including:

- a number of foil plates, electrically coupled at a first end;

a conductive polymer;
a dielectric layer separating the number of foil plates from the conductive polymer;
a metal containing coating over the conductive polymer;
a first polarity connection coupled to the number of foil plates at the first end;
a second polarity connection coupled to the metal containing coating;
and
a plurality of terminals coupled to the number of plate assemblies, wherein terminal polarity is alternated from the first polarity to the second polarity in a row along a side of the capacitor package.

14. The capacitor of claim 13, wherein the number of foil plates foil plates include a number of aluminum foil plates.

15. The capacitor of claim 13, wherein the capacitor package includes a form factor for a multi layer ceramic capacitor.

16. The capacitor of claim 13, wherein the first polarity connections are electrically connected to each other within the capacitor package.

17. The capacitor of claim 13, wherein the second polarity connections are electrically connected to each other within the capacitor package.

18. An information handling system, comprising:
a motherboard;
a voltage regulation circuit coupled to the motherboard, including a capacitor that includes:
a capacitor package;

a number of plate assemblies housed within the capacitor package, each plate assembly having a first polarity connection and a second polarity connection;

a plurality of terminals, wherein multiple first polarity connections are coupled to a single first polarity terminal and corresponding multiple second polarity connections are coupled to multiple second polarity terminals;

a processor chip;

a dynamic random access memory; and

a bus coupled between the processor chip and the dynamic random access memory.

19. The information handling system of claim 18, wherein the dynamic random access memory includes a synchronous dynamic random access memory.

20. The information handling system of claim 18, wherein the capacitor package includes a cylindrical volume and the a number of plate assemblies include fan-like plate assemblies.

21. The information handling system of claim 18, wherein the plurality of terminals includes multiple first polarity terminals.